


NOTICE: This report is required by 49 CFR Part 191. Failure to report can result in a civil penalty not to exceed 100,000 for each violation for each day that such violation persists except that the maximum civil penalty shall not exceed \$1,000,000 as provided in 49 USC 60122.		OMB NO: 2137-0522 EXPIRATION DATE: 8/31/2020	
 U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration	Original Report Date:		05/10/2019
	No.		20190049- 32113
			(DOT Use Only)
INCIDENT REPORT - GAS DISTRIBUTION SYSTEM			
A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2137-0522. All responses to this collection of information are mandatory. Send comments regarding the burden or any other aspect of this collection of information, including suggestions for reducing the burden to: Information Collection Clearance Officer, PHMSA, Office of Pipeline Safety (PHP-30) 1200 New Jersey Avenue, SE, Washington, D.C. 20590.			
INSTRUCTIONS			
Important: Please read the separate instructions for completing this form before you begin. They clarify the information requested and provide specific examples. If you do not have a copy of the instructions, you can obtain one from the PHMSA Pipeline Safety Community Web Page at http://www.phmsa.dot.gov/pipeline/library/forms .			
PART A - KEY REPORT INFORMATION			
Report Type: (select all that apply)		Original:	Supplemental:
		Yes	Final:
Last Revision Date			
1. Operator's OPS-issued Operator Identification Number (OPID):		15938	
2. Name of Operator		PUBLIC SERVICE CO OF NORTH CAROLINA	
3. Address of Operator:			
3a. Street Address		800 GASTON ROAD	
3b. City		GASTONIA	
3c. State		North Carolina	
3d. Zip Code		28056	
4. Local time (24-hr clock) and date of the Incident:		04/10/2019 10:06	
5. Location of Incident:			
5a. Street Address or location description		115 N Duke Street	
5b. City		Durham	
5c. County or Parish		Durham	
5d. State:		North Carolina	
5e. Zip Code:		27701	
5f. Latitude:		35.59599	
Longitude:		-78.54286	
6. National Response Center Report Number:		1242352	
7. Local time (24-hr clock) and date of initial telephonic report to the National Response Center:		04/10/2019 11:17	
8. Incident resulted from:		Unintentional release of gas	
9. Gas released:		Natural Gas	
- Other Gas Released Name:			
10. Estimated volume of gas released - Thousand Cubic Feet (MCF):		46.000	
11. Were there fatalities?		Yes	
- If Yes, specify the number in each category:			
11a. Operator employees		1	
11b. Contractor employees working for the Operator		0	
11c. Non-Operator emergency responders		0	
11d. Workers working on the right-of-way, but NOT associated with this Operator		0	
11e. General public		1	
11f. Total fatalities (sum of above)		2	
12. Were there injuries requiring inpatient hospitalization?		Yes	
- If Yes, specify the number in each category:			
12a. Operator employees		0	
12b. Contractor employees working for the Operator		0	
12c. Non-Operator emergency responders		1	
12d. Workers working on the right-of-way, but NOT associated with this Operator		2	
12e. General public		2	
12f. Total injuries (sum of above)		5	
13. Was the pipeline/facility shut down due to the incident?		Yes	
- If No, Explain:			
- If Yes, complete Questions 13a and 13b: (use local time, 24-hr clock)			

13a. Local time and date of shutdown:	04/10/2019 11:10
13b. Local time pipeline/facility restarted:	
- Still shut down? (* Supplemental Report Required)	Yes
14. Did the gas ignite?	No
15. Did the gas explode?	Yes
16. Number of general public evacuated:	10
17. Time sequence (use local time, 24-hour clock):	
17a. Local time operator identified Incident - effective 10-2014, "Incident" changed to "failure"	04/10/2019 09:35
17b. Local time operator resources arrived on site:	04/10/2019 10:03
PART B - ADDITIONAL LOCATION INFORMATION	
1. Was the Incident on Federal land?	No
2. Location of Incident	Public property
3. Area of Incident:	Underground
Specify:	Under pavement
If Other, Describe:	
Depth of Cover:	30
4. Did Incident occur in a crossing?	No
- If Yes, specify type below:	
- If Bridge crossing –	
Cased/ Uncased:	
- If Railroad crossing –	
Cased/ Uncased/ Bored/drilled	
- If Road crossing –	
Cased/ Uncased/ Bored/drilled	
- If Water crossing –	
Cased/ Uncased	
Name of body of water (If commonly known):	
Approx. water depth (ft):	
PART C - ADDITIONAL FACILITY INFORMATION	
1. Indicate the type of pipeline system:	Investor Owned
- If Other, specify:	
2. Part of system involved in Incident:	Service
- If Other, specify:	
2a. Year "Part of system involved in Incident" was installed:	2008
3. When "Main" or "Service" is selected as the "Part of system involved in Incident" (from PART C, Question 2), provide the following:	
3a. Nominal diameter of pipe (in):	.75
3b. Pipe specification (e.g., API 5L, ASTM D2513):	ASTM D2513
3c. Pipe manufacturer:	Performance
3d. Year of manufacture:	Unknown
4. Material involved in Incident:	Plastic
- If Other, specify:	
4a. If Steel, Specify seam type:	
None/Unknown?	
4b. If Steel, Specify wall thickness (inches):	
4c. If Plastic, Specify type:	Polyethylene (PE)
- If Other, describe:	
4d. If Plastic, Specify Standard Dimension Ratio (SDR):	11
Or wall thickness:	
4e. If Polyethylene (PE) is selected as the type of plastic in Part C, Question 4.c:	
- Specify PE Pipe Material Designation Code (i.e. 2406, 3408, etc.)	2406
Unknown?	
5. Type of release involved :	Mechanical Puncture
- If Mechanical Puncture - Specify Approx size:	
Approx. size: in. (axial):	2.00
in. (circumferential):	.80
- If Leak - Select Type:	
- If Other, Describe:	
- If Rupture - Select Orientation:	
- If Other, Describe:	
Approx. size: (widest opening):	
(length circumferentially or axially):	
- If Other - Describe:	

PART D - ADDITIONAL CONSEQUENCE INFORMATION	
1. Class Location of Incident :	Class 3 Location
2. Estimated Property Damage :	
2a. Estimated cost of public and non-Operator private property damage paid/reimbursed by the Operator – effective 6-2011, "paid/reimbursed by the Operator" removed	\$ 20,000,000
Estimated cost of gas released – effective 6-2011, moved to item 2f	
2b. Estimated cost of Operator's property damage & repairs	\$ 7,638
2c. Estimated cost of Operator's emergency response	\$ 15,467
2d. Estimated other costs	\$ 0
- Describe:	Unknown. Investigation is ongoing.
2e. Property damage subtotal (sum of above)	\$ 20,023,105
Cost of Gas Released	
2f. Estimated cost of gas released	\$ 196
Total of all costs	\$ 20,023,301
3. Estimated number of customers out of service:	
3a. Commercial entities	20
3b. Industrial entities	0
3c. Residences	0
PART E - ADDITIONAL OPERATING INFORMATION	
1. Estimated pressure at the point and time of the Incident (psig):	58.00
2. Normal operating pressure at the point and time of the Incident (psig):	58.00
3. Maximum Allowable Operating Pressure (MAOP) at the point and time of the Incident (psig):	60.00
4. Describe the pressure on the system relating to the Incident:	Pressure did not exceed MAOP
5. Was a Supervisory Control and Data Acquisition (SCADA) based system in place on the pipeline or facility involved in the Incident?	Yes
- If Yes:	
5a. Was it operating at the time of the Incident?	Yes
5b. Was it fully functional at the time of the Incident?	Yes
5c. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume or pack calculations) assist with the detection of the Incident?	No
5d. Did SCADA-based information (such as alarm(s), alert(s), event(s), and/or volume calculations) assist with the confirmation of the Incident?	No
6. How was the Incident initially identified for the Operator?	Other
- If Other, Specify:	notification from excavator via their NC-811 notification
6a. If "Controller", "Local Operating Personnel, including contractors", "Air Patrol", or "Ground Patrol by Operator or its contractor" is selected in Question 6, specify.	
7. Was an investigation initiated into whether or not the controller(s) or control room issues were the cause of or a contributing factor to the Incident?	No, the Operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to: (provide an explanation for why the Operator did not investigate)
- If "No, the operator did not find that an investigation of the controller(s) actions or control room issues was necessary due to:" (provide an explanation for why the operator did not investigate)	While there are two SCADA monitoring points on the distribution system, both are located on larger diameter feeder mains approximately 2 miles upstream; the volume of gas lost was inconsequential vs. the line-pack and delivery capacities in these feeder mains such that there was not a significant or correlating resultant pressure drop at these points.
- If Yes, Specify investigation result(s) (select all that apply):	
- Investigation reviewed work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Investigation did NOT review work schedule rotations, continuous hours of service (while working for the Operator), and other factors associated with fatigue	
- Provide an explanation for why not:	
- Investigation identified no control room issues	
- Investigation identified no controller issues	
- Investigation identified incorrect controller action or controller error	
- Investigation identified that fatigue may have affected the controller(s) involved or impacted the involved controller(s) response	
- Investigation identified incorrect procedures	

- Investigation identified incorrect control room equipment operation	
- Investigation identified maintenance activities that affected control room operations, procedures, and/or controller response	
- Investigation identified areas other than those above	
Describe:	
PART F - DRUG & ALCOHOL TESTING INFORMATION	
1. As a result of this Incident, were any Operator employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
1a. How many were tested:	
1b. How many failed:	
2. As a result of this Incident, were any Operator contractor employees tested under the post-accident drug and alcohol testing requirements of DOT's Drug & Alcohol Testing regulations?	No
- If Yes:	
2a. How many were tested:	
2b. How many failed:	
PART G - CAUSE INFORMATION	
<i>Select only one box from PART G in shaded column on left representing the Apparent Cause of the Incident, and answer the questions on the right. Describe secondary, contributing, or root causes of the Incident in the narrative (PART H).</i>	
Apparent Cause:	G3 - Excavation Damage
G1 - Corrosion Failure – only one sub-cause can be picked from shaded left-hand column	
Corrosion Failure Sub-Cause:	
- If External Corrosion:	
1. Results of visual examination:	
- If Other, Specify:	
2. Type of corrosion:	
- Galvanic	
- Atmospheric	
- Stray Current	
- Microbiological	
- Selective Seam	
- Other	
- If Other, Describe:	
3. The type(s) of corrosion selected in Question 2 is based on the following:	
- Field examination	
- Determined by metallurgical analysis	
- Other	
- If Other, Describe:	
4. Was the failed item buried under the ground?	
- If Yes:	
4a. Was failed item considered to be under cathodic protection at the time of the incident?	
- If Yes, Year protection started:	
4b. Was shielding, tenting, or disbonding of coating evident at the point of the incident?	
4c. Has one or more Cathodic Protection Survey been conducted at the point of the incident?	
If "Yes, CP Annual Survey" – Most recent year conducted:	
If "Yes, Close Interval Survey" – Most recent year conducted:	
If "Yes, Other CP Survey" – Most recent year conducted:	
- If No:	
4d. Was the failed item externally coated or painted?	
5. Was there observable damage to the coating or paint in the vicinity of the corrosion?	
6. Pipeline coating type, if steel pipe is involved:	
- If Other, Describe:	
- If Internal Corrosion:	
7. Results of visual examination:	
- If Other, Describe:	
8. Cause of corrosion (select all that apply):	

- Corrosive Commodity	
- Water drop-out/Acid	
- Microbiological	
- Erosion	
- Other	
- If Other, Specify:	
9. The cause(s) of corrosion selected in Question 8 is based on the following: <i>(select all that apply)</i> :	
- Field examination	
- Determined by metallurgical analysis	
- Other	
- If Other, Describe:	
10. Location of corrosion <i>(select all that apply)</i> :	
- Low point in pipe	
- Elbow	
- Drop-out	
- Other	
- If Other, Describe:	
11. Was the gas/fluid treated with corrosion inhibitor or biocides?	
12. Were any liquids found in the distribution system where the Incident occurred?	
Complete the following if any Corrosion Failure sub-cause is selected AND the "Part of system involved in incident" (from PART C, Question 2) is Main, Service, or Service Riser.	
13. Date of the most recent Leak Survey conducted	
14. Has one or more pressure test been conducted since original construction at the point of the Incident?	
- If Yes:	
Most recent year tested:	
Test pressure:	
G2 – Natural Force Damage – only one sub-cause can be picked from shaded left-handed column	
Natural Force Damage – Sub-Cause:	
- If Earth Movement, NOT due to Heavy Rains/Floods:	
1. Specify:	
- If Other, Specify:	
- If Heavy Rains/Floods:	
2. Specify:	
- If Other, Specify:	
- If Lightning:	
3. Specify:	
- If Temperature:	
4. Specify:	
- If Other, Specify:	
- If Other Natural Force Damage:	
5. Describe:	
Complete the following if any Natural Force Damage sub-cause is selected.	
6. Were the natural forces causing the Incident generated in conjunction with an extreme weather event?	
6.a If Yes, specify <i>(select all that apply)</i> :	
- Hurricane	
- Tropical Storm	
- Tornado	
- Other	
- If Other, Specify:	
G3 – Excavation Damage – only one sub-cause can be picked from shaded left-hand column	
Excavation Damage – Sub-Cause:	
	Excavation Damage by Third Party
- If Previous Damage due to Excavation Activity: Complete the following ONLY IF the "Part of system involved in Incident" (from Part C, Question 2) is Main, Service, or Service Riser.	
1. Date of the most recent Leak Survey conducted	
2. Has one or more pressure test been conducted since original construction at the point of the Incident?	
- If Yes:	
Most recent year tested:	
Test pressure:	

Complete the following if Excavation Damage by Third Party is selected.	
3. Did the operator get prior notification of the excavation activity?	Yes
3a. If Yes, Notification received from: <i>(select all that apply)</i> :	
- One-Call System	Yes
- Excavator	
- Contractor	
- Landowner	
Complete the following mandatory CGA-DIRT Program questions if any Excavation Damage sub-cause is selected.	
4. Do you want PHMSA to upload the following information to CGA-DIRT (www.cga-dirt.com)?	No
5. Right-of-Way where event occurred <i>(select all that apply)</i> :	
- Public	Yes
- If Public, Specify:	City Street
- Private	
- If Private, Specify:	
- Pipeline Property/Easement	
- Power/Transmission Line	
- Railroad	
- Dedicated Public Utility Easement	
- Federal Land	
- Data not collected	
- Unknown/Other	
6. Type of excavator :	Contractor
7. Type of excavation equipment :	Directional Drilling
8. Type of work performed :	Telecommunications
9. Was the One-Call Center notified?	Yes
9a. If Yes, specify ticket number:	190931483
9b. If this is a State where more than a single One-Call Center exists, list the name of the One-Call Center notified:	
10. Type of Locator:	Contract Locator
11. Were facility locate marks visible in the area of excavation?	Yes
12. Were facilities marked correctly?	Unknown/Other
13. Did the damage cause an interruption in service?	Yes
13a. If Yes, specify duration of the interruption:	
14. Description of the CGA-DIRT Root Cause <i>(select only the one predominant first level CGA-DIRT Root Cause and then, where available as a choice, the one predominant second level CGA-DIRT Root Cause as well)</i> :	
- Root Cause Description:	Other
- If One-Call Notification Practices Not Sufficient, specify:	
- If Locating Practices Not Sufficient, specify:	
- If Excavation Practices Not Sufficient, specify:	
- If Other/None of the Above, explain:	Investigation is ongoing.
G4 - Other Outside Force Damage - only one sub-cause can be selected from the shaded left-hand column	
Other Outside Force Damage – Sub-Cause:	
- If Damage by Car, Truck, or Other Motorized Vehicle/Equipment NOT Engaged in Excavation:	
1. Vehicle/Equipment operated by:	
- If Damage by Boats, Barges, Drilling Rigs, or Other Maritime Equipment or Vessels Set Adrift or Which Have Otherwise Lost Their Mooring:	
2. Select one or more of the following IF an extreme weather event was a factor:	
- Hurricane	
- Tropical Storm	
- Tornado	
- Heavy Rains/Flood	
- Other	
- If Other, Specify:	
- If Previous Mechanical Damage NOT Related to Excavation: Complete the following ONLY IF the "Part of system involved in Incident" (from Part C, Question 2) is Main, Service, or Service Riser.	
3. Date of the most recent Leak Survey conducted:	
4. Has one or more pressure test been conducted since original construction at the point of the Incident?	
- If Yes:	
Most recent year tested:	
Test pressure (psig):	
- If Intentional Damage:	

5. Specify:	
- If Other, Specify:	
- If Other Outside Force Damage:	
6. Describe:	
G5 - Pipe, Weld, or Joint Failure - only one sub-cause can be selected from the shaded left-hand column	
Pipe, Weld or Joint Failure – Sub-Cause:	
- If Body of Pipe:	
1. Specify:	
- If Other, Describe:	
- If Butt Weld:	
2. Specify:	
- If Other, Describe:	
- If Fillet Weld:	
3. Specify:	
- If Other, Describe:	
- If Pipe Seam:	
4. Specify:	
- If Other, Describe:	
- If Mechanical Fitting:	
5. Specify the mechanical fitting involved:	
- If Other, Describe:	
6. Specify the type of mechanical fitting:	
- If Other, Describe:	
7. Manufacturer:	
8. Year manufactured:	
9. Year Installed:	
10. Other attributes:	
11. Specify the two materials being joined:	
11a. First material being joined:	
- If Other, Specify:	
11b. If Plastic, specify:	
- If Other Plastic, specify:	
11c. Second material being joined:	
- If Other, Specify:	
11d. If Plastic, specify:	
- If Other Plastic, Specify:	
12. If used on plastic pipe, did the fitting – as designed by the manufacturer – include restraint?	
12a. If Yes, specify:	
- If Compression Fitting:	
13. Fitting type:	
14. Manufacturer:	
15. Year manufactured:	
16. Year installed:	
17. Other attributes:	
18. Specify the two materials being joined:	
18a. First material being joined:	
- If Other, specify:	
18b. If Plastic, specify:	
- If Other Plastic, specify:	
18c. Second material being joined:	
If Other, specify:	
18d. If Plastic, specify:	
- Other Plastic, specify:	
- If Fusion Joint:	
19. Specify:	
- If Other, Specify:	
20. Year installed:	
21. Other attributes:	
22. Specify the two materials being joined:	
22a. First material being joined:	
- If Other, Specify:	
22b. Second material being joined:	

- If Other, Specify:	
- If Other Pipe, Weld, or Joint Failure:	
23. Describe:	
Complete the following if any Pipe, Weld, or Joint Failure sub-cause is selected.	
24. Additional Factors (<i>select all that apply</i>):	
- Dent	
- Gouge	
- Pipe Bend	
- Arc Burn	
- Crack	
- Lack of Fusion	
- Lamination	
- Buckle	
- Wrinkle	
- Misalignment	
- Burnt Steel	
- Other	
- If Other, Specify:	
25. Was the Incident a result of:	
- Construction defect	
Specify:	
- Material defect	
Specify:	
- If Other, Specify:	
- Design defect	
- Previous damage	
26. Has one or more pressure test been conducted since original construction at the point of the Incident?	
- If Yes:	
Most recent year tested:	
Test pressure:	
G6 - Equipment Failure - only one sub-cause can be selected from the shaded left-hand column	
Equipment Failure – Sub-Cause:	
- If Malfunction of Control/Relief Equipment:	
1. Specify:	
- Control Valve	
- Instrumentation	
- SCADA	
- Communications	
- Block Valve	
- Check Valve	
- Relief Valve	
- Power Failure	
- Stopple/Control Fitting	
- Pressure Regulator	
- Other	
- If Other, Specify:	
- If Threaded Connection Failure:	
2. Specify:	
- If Other, Specify:	
- If Non-threaded Connection Failure:	
3. Specify:	
- If Other, Specify:	
- If Valve:	
4. Specify:	
- If Other, Specify:	
4a. Valve type:	
4b. Manufactured by:	
4c. Year manufactured:	
- If Other Equipment Failure:	
5. Describe:	
G7 - Incorrect Operation - only one sub-cause can be selected from the shaded left-hand column	

Incorrect Operation Sub-Cause:	
- If Other Incorrect Operation:	
1. Describe:	
Complete the following if any Incorrect Operation sub-cause is selected.	
2. Was this Incident related to: (select all that apply)	
- Inadequate procedure	
- No procedure established	
- Failure to follow procedure	
- Other	
- If Other, Describe:	
3. What category type was the activity that caused the Incident:	
4. Was the task(s) that led to the Incident identified as a covered task in your Operator Qualification Program?	
4a. If Yes, were the individuals performing the task(s) qualified for the task(s)?	
G8 - Other Incident Cause - only one sub-cause can be selected from the shaded left-hand column	
Other Incident Cause – Sub-Cause:	
- If Miscellaneous:	
1. Describe:	
- If Unknown:	
2. Specify:	
PART H - NARRATIVE DESCRIPTION OF THE INCIDENT	
<p>On the morning of April 10, 2019, a third-party telecommunications contractor, while in the process of boring in new facilities via horizontal directional drilling along N Duke Street in Durham NC, damaged below-ground piping in PSNC's natural gas system. The contractor notified NC-811, the state's one-call office, of the damage at approximately 9:31 am. NC 811 in turn automatically generated a damage ticket which was delivered to PSNC at approximately 9:35 am. An order was then automatically dispatched to PSNC's first responder at approximately 9:36 am. The first responder reviewed the ticket at approximately 9:43 am and began heading to the site. PSNC received a call from 911 at approximately 9:48 am noting that the fire department was already on the scene. PSNC's Dispatch contacted the first responder in route to advise him of a gas odor and a damaged line at 115 N Duke Street. The fire department issued a combination of evacuation and shelter in place orders at approximately 9:58 am. PSNC's first responder arrived at approx. 10:03 am. Between his arrival and approximately 10:06 am, the PSNC first responder as well as PSNC's Dispatch contacted additional resources to assist with securing and making the scene safe. At approximately 10:06 am, the structure at 115 N Duke Street exploded. Between 10:26am and 10:50 am, additional PSNC employees including a construction crew arrived at the site. Crews convened at the incident command center to evaluate options to shut off the gas flow. At 11:05 am the crews identified the proper valve, secured the necessary tools, and at approximately 11:10 am shut off gas flow to the impacted area by closing a valve located approximately three blocks from the scene. PSNC has since performed a leakage survey over the remaining piping in the vicinity with no leaks or issues found. The section of main approximately 1 block paralleling the bore on Duke Street remains out of service pending the investigation.</p> <p>The explosion killed the owner/occupant in the structure that was evacuated. The explosion also severely injured a member of the contractor crew, the PSNC first responder, and a fire fighter. 17 to 25 individuals were reportedly taken to local area hospitals. Six are believed to have been admitted, including PSNC's first responder who died in the hospital, as a result of his injuries, on April 25th.</p> <p>The explosion destroyed the structure at 115 N Duke Street and reportedly damaged two others to a point of being condemned until repairs could be completed. Approximately 15 buildings in total were reportedly damaged by the force of the explosion.</p> <p>As to PSNC's investigation, it is still ongoing. To date, the investigation has revealed that the service line feeding the structure that exploded was punctured during the directional drilling operation. However, while PSNC has determined that its gas facilities were located by its contract service provider, the investigation has not yet confirmed that the lines either were or were not marked accurately.</p> <p>PSNC has had no known issues with the distribution system in this area in the recent past. 15 of 20 impacted customers have been restored.</p> <p>As of this report, and until the scene is fully investigated, there remains a number of additional unknowns:</p> <ul style="list-style-type: none"> * PSNC has not yet been able to determine the precise time that its gas system was damaged. * PSNC has not been able to determine the ignition source inside of the structure that exploded. * PSNC has not been able to determine the precise number of injuries, again reported in the media to be between 17 and 25 persons. * PSNC still has not developed precise assessments of costs of property damage (operator and public), restoration/repairs that 	

will be required to re-commission the gas system, emergency response costs, the amount of lost gas, etc. Therefore, all figures in this report should be read as estimates until finalized and provided by supplemental reports.

PART I - PREPARER AND AUTHORIZED SIGNATURE

Preparer's Name	Michael B. Greene
Preparer's Title	General Manager-Engineering Services
Preparer's Telephone Number	704-217-9191
Preparer's E-mail Address	mgreene@scana.com
Preparer's Facsimile Number	
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Authorized Signature's Title	General Manager-Operations and Maintenance
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